

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A computer program product for execution by a server computer for performing resource pool size maintenance for an application server, comprising:
  - computer code for triggering a resource pool shrink check;
  - computer code for determining that pool shrinking is necessary;
  - computer code for reducing resources that have been determined to be at least one of not created successfully and not able to be refreshed in an unavailable deque; and
  - computer code for reducing resources that have been determined to be available in an available deque.
2. (Original) The computer program product of claim 1 wherein said computer code for triggering a resource pool shrink check includes:
  - computer code for determining that a period of time has expired; and
  - computer code for performing the resource pool shrink check at the expiration of the period of time.
3. (Original) The computer program product of claim 2 wherein the period of time is set by a programmable attribute.
4. (Currently Amended) The computer program product of claim 1 wherein said computer code for determining that pool shrinking is necessary includes:
  - computer code for detecting resources contained in an the available deque or a the unavailable deque.
5. (Original) The computer program product of claim 1 wherein computer code for

determining that pool shrinking is necessary includes:

computer code for determining the number of resources in the resource pool is greater than a maximum resource pool threshold value.

6. (Original) The computer program product of claim 5 wherein the maximum resource pool threshold value is set by a programmable attribute.

7. (Original) The computer program product of claim 1 wherein computer code for reducing resources in an unavailable deque includes:

computer code for reducing resources in an unavailable deque to coincide with a maximum unavailable resources threshold.

8. (Original) The computer program product of claim 7 wherein the reduced resources in the unavailable deque are destroyed.

9. (Original) The computer program product of claim 1 wherein computer code for reducing resources in an available deque includes:

computer code for reducing resources in an available deque to coincide with a maximum available resources threshold.

10. (Original) The computer program product of claim 9 wherein resources in the available deque are destroyed.

11. (Currently Amended) A computer program product for execution by a server computer for performing resource pool maintenance for an application server, comprising:

computer code for triggering a test for pool resources;

computer code for determining whether at least one of the resources is functioning properly by performing a test on pool resources; and

computer code for refreshing pool resources based on the pool resources testing.

12. (Original) The computer program product of claim 11 wherein said computer code for triggering a test for pool resources includes:

computer code for determining that a period of time has expired; and

computer code for performing the resource pool shrink check at the expiration of the period of time.

13. (Currently Amended) The computer program product of claim 11 wherein said computer code for determining whether at least one of the resources is functioning properly by performing a test on pool resources includes:

computer code for ~~determining if pool resources are functioning properly, wherein the resources are refreshed if they are~~ refreshing resources determined to not be functioning properly.

14. (Currently Amended) A computer program product for execution by a server computer for performing maintenance on connection pool dequeues in an application server, comprising:

computer code for traversing an unavailable deque of resources that have been determined to be at least one of not created successfully and not able to be refreshed and a reserved deque of resources that are allocated;

computer code for performing maintenance on the unavailable deque; and

computer code for performing maintenance on the reserved deque.

15. (Original) The computer program product as claimed in claim 14 wherein said computer code for traversing an unavailable and a reserved deque includes:

computer code for determining what resources are available in the unavailable deque and the reserved deque.

16. (Original) The computer program product as claimed in claim 14 wherein said computer code for performing maintenance on the unavailable deque includes:

computer code for scheduling resource creation for each resource in the unavailable deque.

17. (Original) The computer program product as claimed in claim 14 wherein said computer code for performing maintenance on the reserved deque includes:

computer code for scheduling resource creation for each resource in the reserved deque.

18. (Currently Amended) A computer program product for execution by a server computer for performing resource creation in a connection pool in an application server, comprising:

computer code for generating a resource in connection pool;

computer code for ~~confirming the generation of the resource~~ determining that the resource was created successfully in the connection pool; and

computer code for moving the resource to an available deque; ~~if~~ when successful generation of the resource is confirmed, otherwise moving the resource to an unavailable deque for tracking resources that are not created successfully;

19. (Original) The computer program product of claim 18 further comprising:

computer code for determining that a period of time has expired; and

computer code for generating a resource at the expiration of the period of time.

20. (Currently Amended) A computer program product for performing resource pool maintenance, comprising:

computer code for determining that pool shrinking is necessary;

computer code for removing unavailable resources that have been determined to be at least one of not created successfully and not able to be refreshed from an unavailable deque of a resource pool; and

computer code for removing available resources from an available deque of the resource pool.